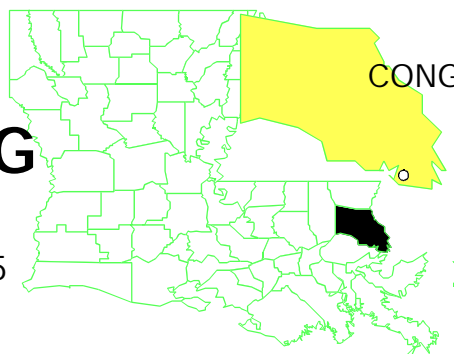


SOUTHERN SHIPBUILDING LOUISIANA

EPA ID# LAD008148015



EPA REGION 6

CONGRESSIONAL DISTRICT 01

St. Tammany Parish
Slidell

Updated: 06/20/00

Site Description

- Location:** ! The Southern Shipbuilding Corporation Superfund site is a former barge cleaning, building, docking and repair facility located within St. Tammany Parish, in the city of Slidell, Louisiana.
- ! The site is located on 54 acres at 999 Canulette Road, just down stream of the U.S. Highway 433 bridge and adjacent to Bayou Bonfouca, approximately 1.5 miles downstream of the Bayou Bonfouca Superfund site.
- Population:** ! Approximately 26,000 residents live in the surrounding community.
- Setting:** ! Nearest residence potentially impacted by the site is approximately 400 feet from the site, to the southwest.
- ! Nearest drinking water well is approximately 1/4 mile southwest of the site.
- ! The southeast portion of the site is heavily wooded.
- ! The site is bordered on the north and east by Bayou Bonfouca, on the south by Canulette Road and on the west by Bonfouca Road.
- ! Contaminants from the site have been found in Bayou Bonfouca.
- Hydrology:** ! A uniform clay layer was found to underlie the impoundments and most of the site.
- ! A contaminated saturated zone exists above the clay layer and ground water movement is toward the bayou in a northwest direction.
- ! Another water bearing unit referred to as the upper confined aquifer, which has not been contaminated by the impoundments, was found below the clay and flows to the south.

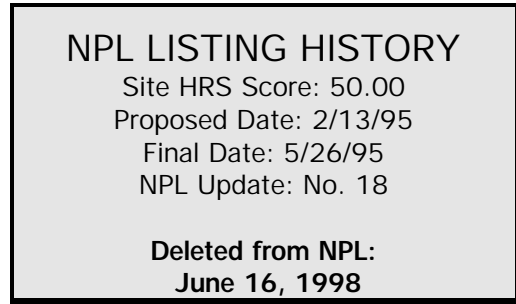
Wastes and Volumes

- ! PITS- 35,000 cubic yards of sludges highly contaminated with polycyclic aromatic hydrocarbons (PAH's) were in several pits and lagoons, comprising about 8 acres.
- ! GRAVING DOCK- Sediment contained tri-butyl-tin (estimated 3,000 cubic yards) from decades of hull repair.
- ! PROPERTY- The facility comprises 53 acres and prior to remediation contained a wide variety of "hot spots," including: explosive/volatile paints, soils contaminated with elevated levels of

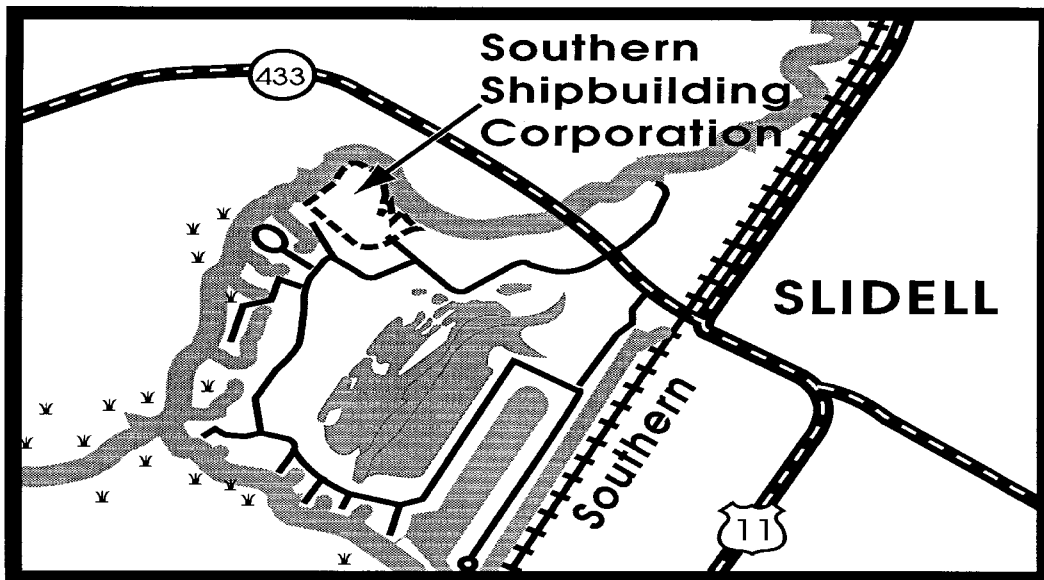
metal contaminants such as lead and copper, polychlorinated biphenyls (PCB) and poly cyclic aromatic hydrocarbon (PAH) contaminated soils, and surface asbestos contamination.

- ! BAYOU- contamination from pits and graving dock have been released into the bayou although concentrations are below cleanup levels.

Site Assessment and Ranking



Site Map and Diagram



The Remediation Process

Site History:

- ! A shipbuilding plant began operating at the site in 1919 under the direction of Canulette Shipbuilding. In 1954, Canulette Shipbuilding sold the business to J & S Shipbuilding. Records of the site operations by either of these companies are unavailable.

- ! In 1957, Southern Shipbuilding Corporation purchased the property from J & S Shipbuilding. Southern Shipbuilding Corporation ran the facility from 1957 until 1993, during which time it performed gas freeing, building, docking and repairing operations.
- ! The results of EPA's and the Louisiana Department of Environmental Quality's (LDEQ's) investigative efforts in late 1992 and early 1993 provided evidence that the site posed significant human health and environmental threat.
- ! During the summers of 1993 and 1994, EPA conducted emergency removal actions to provide additional freeboard within the surface impoundments.
- ! The removal actions consisted of pumping contaminated water from the surface impoundments, treating it through sand and activated carbon filtration and discharging the treated water to Bayou Bonfouca.
- ! In February 1995, sheet piling was driven along the edge of the waterway to prevent catastrophic failure of the existing levee.
- ! In April 1995, a removal action took place which consisted of off site disposal of numerous containers of paints, solvents and other chemicals from the building referred to as the "paint shed."
- ! Early investigations by EPA showed several types of contamination at the site:
 - 1) Slightly contaminated surface and subsurface soil in the proximity of the impoundments area extending from the surface down to about 10 feet;
 - 2) Highly contaminated sludges and soils in the impoundments and over flow areas, and soils in close proximity to these areas;
 - 3) Sediments within and immediately near the graving dock (dry dock); and
 - 4) Slight contamination in sediments of Bayou Bonfouca.
- ! The Site was divided into two Operable Units (OUs): OU 1 comprises the surface impoundments and graving dock, OU 2 comprises the remaining approximately 45 acres.
- ! Operable Unit Two was found to be contaminated with metals, organic compounds, and asbestos in several areas within OU2. These contaminants were addressed by numerous removal actions for each contaminated area.
- ! The following provides a summary of Superfund activities:
 - 1995 - February site proposed to National Priorities List (NPL)
 - March Remedial Investigation/Feasibility Study/Environmental Engineering and Cost Analysis (RI/FS/EECA) completed, Proposed Plan for Pits issued
 - April Removal Action initiated to complete assessment of site; remove hot spots.
 - May Public comment period ended after 68 days and 4 community meetings, letter recommending final NPL placement from Governor Edwards received, site finalized on NPL. Incineration of the Southern Shipbuilding waste at the Bayou Bonfouca incinerator ended May 19, 1995.
 - July Record of Decision Signed, Remedial Design completed, Remedial Action initiated with signing of Interagency Agreement Grant (IAG) with the USACE.
 - August USACE contractors mobilize
 - September excavation of wastes begin, shakedown burn initiated
 - December Demonstration Burn completed
 - 1996 - January Open House to discuss results of Demonstration Burn
 - February & March Open Houses to discuss Remedial Investigation and Feasibility Study for OU#2
 - June Removal Actions in OU2 were completed
 - September 30 Incineration Complete - Approximately 67,000 cubic yards of hazardous waste was detoxified.

- November Ribbon Cutting Ceremony to celebrate completion of incineration activities.
- December Public Meeting for Proposed Final Plan for OUs 1 & 2.
- 1997 - April Asbestos Removal Actions Initiated
- June Clay Cover on OU1 Landfill extended
- July Asbestos Removal Actions Completed
- September Record of Decision for OU2 Completed
- September 450th Superfund Site Completion Ceremony
- November EPA inspection of landfill erosion
- 1998 - March Notice of Intent to Delete
- April Public Comment
- June Deletion Notice, Removal of Remaining Groundwater Monitoring Wells
- August Annual Inspection Report
- 1999 - June Annual Inspection

Health Considerations:

- ! The pits and hot spots at this site contained highly toxic materials. The property was not safe for human habitation nor was it usable for commercial enterprise. Human health threats also existed for recreational users of the Bayou.
- ! Flooding occurred in the area and residents along the Bayou complained that contaminants from the site have been deposited on their residential properties.

Other Environmental Risks:

- ! Sediments in and around the graving dock were contaminated with tributyltin (TBT), an anti-fouling paint additive, and an extremely powerful toxin.
- ! Catastrophic failures of the levees occurred over the years releasing pit contaminants into the Bayou.

Record of Decision

OPERABLE UNIT #1
Signed: July 20, 1995

- ! The Southern Shipbuilding Superfund site remedy for OU1 included:

- Off site incineration of site pit wastes (at nearby Bayou Bonfouca site)
- Consolidation/capping of soils on site not addressed by incineration
- Consolidation/capping of incinerator ash on site
- Removal and incineration of tributyltin-contaminated sediments from the graving dock

Approximate Cost for OU1: \$22 Million

- ! The remedy for OU2 called for No Further Federal Remedial Action since the known waste areas had been addressed through extensive removal actions of site wastes.

Approximate Cost for OU2: \$3 Million

Community Involvement

- ! Community Involvement Plan: Developed 01/95
- ! Open houses and workshops: 08/94, 12/94, 02/95, 02/95, 1/96, 2/96, 3/96
- ! Community Advisory Group Meetings: 12/94, 01/95, 02/95, 04/95
- ! Original Proposed Plan Fact Sheet and Public Meeting: 03/95
- ! Original ROD Fact Sheet: 7/31/95 (Operable Unit 1)
- ! Milestone Fact Sheets: Update 07/94, 09/94, 9/96
- ! Citizens on site mailing list: 253
- ! Constituency Interest: High interest at site.
- ! Site Repository: St. Tammany Parish Library, Slidell Branch, Slidell, Louisiana

Technical Assistance Grant

- ! Availability Notice: 01/95, 02/95
- ! Letters of Intent Received: Slidell Working Against Major Pollution (SWAMP), 01/23/95; Earth Beautiful Foundation, 01/20/95 (subsequently withdrawn)
- ! Draft Application Received: 5/29/95
- ! Final Application Received: 12/15/95
- ! Grant Award: 12/15/95 to SWAMP
- ! Budget Period: 12/15/95-12/14/98
- ! Technical Advisor: Wilma Subra Company, New Iberia, LA.
- ! Current Status: SWAMP hired Joel Hirschhorn and Wilma Subra as Technical Advisors on 6/17/96 to review of site documents prior to release of the final proposed plan of action. TAG closed out on 02/24/99.

Contacts

- ! **Remedial Project Manager (EPA):** Caroline Ziegler, 214-665-2178, Mail Code: 6SF-LP
- ! **State Contact:** Duane Wilson (LDEQ), (225) 765-0463
- ! **Community Involvement:** Caroline Ziegler, 214-665-2178, Mail Code: 6SF-LP
- ! **Attorney (EPA):** James L. Turner, 214-665-3159, Mail Code: 6SF-DL
- ! **Prime Contractor:** U.S. Army Corps of Engineers (USACE)/IT-OHM Joint Venture

Enforcement

- ! None. Extensive PRP investigations were unable to identify any viable PRPs.

Present Status and Issues

- ! EPA's Second Annual Inspection is scheduled to take place in the Summer of 1999.
- ! A Notice of Intent to Delete the site from the National Priorities List (NPL) was published in the Federal Register in March 1998.
- ! A Deletion Notice was published in the Federal Register on Tuesday, June 16, 1998.
- ! A Five-Year Review is scheduled to be completed by September 2000.

Benefits

! EPA's actions at the Southern Shipbuilding site have demonstrated outstanding productivity, management skill, creativity, and community-based approaches to solve a major pollution problem in concert with the City of Slidell, Louisiana. By integrating all internal and external aspects of the program, the quality and speed promised in the Agency's Administrative Improvements/Reforms initiatives were fully demonstrated. The creative approach utilized at this site serves as an example of the kinds of improvements that can be made in Superfund nationwide.

In an 18 month period from January 1994 to July 1995, the Southern Shipbuilding Team achieved as much progress as is normally accomplished by EPA in 10 years. During this period:

- ! A Community Advisory Group was formed: More than a dozen formal and informal meetings with concerned citizens and elected officials were held to shape site studies and remedy selection. In addition to a Technical Assistance Grant group, community associations and a Community Advisory Group were actively involved. The approach created mutual trust and the concept that EPA is a partner in solving community environmental problems. A striking measure of this community involvement is that an incineration remedy in the middle of the City received majority support from residents (and a unanimous endorsement by the City Council).
- ! Accelerated the Superfund process with no decrease in quality of work products: In a period of 18 months, EPA:
 - completed 3 stabilizing Removal Actions,
 - completed National Priorities List Site (NPL) evaluation (proposed February 1995, added to the NPL after receiving the endorsement of the Governor of Louisiana in June 1995),
 - completed a full evaluation of over 3,000 potential responsible parties (e.g. barge cleaning customers),
 - completed a total technical characterization of barge cleaning sludge lagoons including: full human health and ecological risk assessment, full Remedial Investigation, pilot tests of biological treatment and incineration, and evaluation of the technical feasibility of 10 remedial options,
 - completed formal remedy selection processes from the proposal of remedy in March, 1995 through a 60 day comment period with public meetings, to the signing of a Record of Decision on July 21, 1995,
 - completed negotiations and received a signed Superfund State Contract on July 28, 1995,
 - completed initial remedial design specifications,

- initiated Remedial Action under a July 28, 1995, interagency agreement with the U.S. Army Corps of Engineers,
- successfully completed incineration of 67,000 cubic yards of contaminated soils and sludges,
- investigated and remediated the remainder of the site,
- developed broad-based community support, and
- set the stage to redevelop the site and return the property to the city tax rolls.